Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 2 and 97 of the Commission's Rules to Create a Low Frequency Allocation for the Amateur Radio Service	)	**ET Docket No. 02-98 RM-9404**
	)	
Amendment of Parts 2 and 97 of the Commission's Rules Regarding an Allocation Of a Band Near 5 MHz for the Amateur Radio Service	)	**RM-10209**
	)	
Amendment of Parts 2 and 97 of the Commission's Rules Concerning the Use of the 2400-2402 MHz Band by the Amateur and Amateur-Satellite Services	)	**RM-9949**

To: The Commission

COMMENTS OF ARRL, THE NATIONAL ASSOCIATION FOR AMATEUR RADIO

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SUMMARY

ARRL, the National Association for Amateur Radio, also known as the American Radio Relay League, Incorporated (ARRL), submits its comments in response to the *Notice of Proposed Rule Making*, FCC 02-136, released May 15, 2002 (the Notice). The Notice proposes to allocate two new frequency bands, one at 135.7-137.8 kHz, and another at 5250-5400 kHz, to the Amateur Radio Service under certain conditions; to upgrade the Amateur Service allocation at 2400-2402 MHz from secondary status to primary status; and to add a primary allocation in that segment for the Amateur-Satellite Service, also regulated under Part 97.

The three allocation proposals in this proceeding should be implemented immediately. The issues are not complex, and compatibility between Amateur uses in the subject bands and any other radio services is not a substantial concern in any of the three cases. The 5 MHz allocation in particular is an urgent priority of the Amateur Service, and it is respectfully requested that this allocation in particular be expedited. The service rules for the LF and the 5 MHz band should be established as requested in the respective ARRL petitions on which this proceeding is based. It is especially important that, in the 135 kHz band, the Commission permit transmitter power output of not less than 200 watts, and in the 5 MHz band, access be provided to all Amateurs holding General, Advanced and Extra Class licenses.

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COMMENTS OF ARRL, THE NATIONAL ASSOCIATION FOR AMATEUR RADIO

ARRL, the National Association for Amateur Radio, also known as the American Radio Relay League, Incorporated (ARRL), by counsel and pursuant to Section 1.415 of the Commission's Rules, hereby respectfully submits its comments in response to the *Notice of Proposed Rule Making*, FCC 02-136, released May 15, 2002 (the Notice). This Notice was published in the Federal Register June 14, 2002 (67 Fed. Reg. 40898), and therefore these comments are timely filed. The Notice proposes to allocate two new frequency bands, one at 135.7-137.8 kHz, and another at 5250-5400 kHz, to the Amateur Radio Service under certain conditions; to upgrade the Amateur Service allocation at 2400-2402 MHz from secondary status to primary status; and to add a primary allocation in that segment for the Amateur-Satellite Service, also regulated under Part 97. In support

of these proposals, and relative to the questions asked in the Notice concerning the implementation of them, ARRL states as follows.

I. Introduction

1. This Notice consolidates three Petitions for Rule Making, each filed by ARRL, regarding three widely disparate frequency allocations. ARRL is grateful for the support of the Amateur Radio Service reflected in this Notice, and the Commission's continued support of the volunteer communications services provided by Amateurs to the public. With respect to one of the subject bands in particular, a major rationale for the allocation is improvement of the already high level of service provided by Amateur Radio licensees in disaster relief and emergency communications; in this case, the 5 MHz allocation will fill a critical propagation gap, especially on paths between the mainland United States and the Caribbean insular areas, thus to permit more reliable communications in the aftermath of weather-related and other disasters.

2. In the months since the September 11, 2001 terrorist attacks, there has been a renewed focus on Amateur Radio and its role as a First Responder in emergency and homeland security planning. The Amateur Service is, perhaps more now than in the past, recognized as a decentralized network of active, willing and capable volunteers with a communications infrastructure that is impossible to disable, and which is readily available at no cost to any served agency in an instant when called upon. The protection and enhancement of existing frequency allocations in the Amateur Service is therefore an even more critical concern of ARRL than heretofore, and this proceeding affirms that the Commission is a partner in that effort. The more than 650,000 licensees of the Commission in the Amateur Service are indeed appreciative of the Commission's

support. Radio Amateurs will use the allocations responsibly and for the benefit of the public, and they will indeed provide good return for the investment of the public's resource.

3. At the same time, the Amateur Service is expected to, and does, fulfill its obligation as a source of technical self-training and advancements in communications technology. The establishment in the United States, for the first time, of a low-frequency (LF) allocation in the Amateur Service is an important event, as it fills a void that does not exist in any other portion of the spectrum. The Amateur Service will, when the Commission makes this allocation, have at least some access to all portions of the radio spectrum. Finally, the upgrading of the Amateur allocation at 2400-2402 MHz constitutes recognition of the importance of the Amateur-Satellite Service in the area of technical development. While this allocation is seriously compromised by the proliferation of unlicensed, and essentially uncontrolled devices in the 2400-2450 MHz band, the Amateur and Amateur-Satellite Services have a unique ability to adapt to most communications environments, and will continue to do so in this case.

4. Though ARRL indeed appreciates the proposals in the Notice, some of the possible conditions under consideration for the Part 97 rules with respect to the 5 MHz allocation, and the Commission's declination to propose an allocation at 160-190 kHz are of significant concern. Certain of the conditions under consideration for the 5 MHz allocation would largely defeat the purpose of the allocation, and are, ARRL would suggest, completely unnecessary to facilitate compatible sharing with incumbent Federal assignments. With respect to the 160-190 kHz band, ARRL made a more than sufficient showing that Amateur operation in that band would have no material effect on Power

Line Carrier (PLC) systems operating on an unlicensed basis. It is urgent that the Commission revisit that issue prior to adopting a Report and Order in this proceeding; or at the very least, leave the issue of Amateur access to 160-190 kHz open for later consideration.

II. The 135.7-137.8 kHz and 160-190 kHz Bands

5. The Commission proposes to allocate the 135.7-137.8 kHz segment (herein referred to as the 135 kHz band) to the Amateur service on a secondary basis, but not the 160-190 kHz segment (the 160 kHz band). ARRL's petition, RM-9404, filed October 22, 1998, had proposed both bands, with a 200-watt PEP output power limitation, but in no case greater than 2 watts EIRP. These limits were carefully determined by technical consultants retained by ARRL, who are experienced in this area of the spectrum. The proposed bands and operating parameters were selected so as to (1) accommodate experimentation, and (2) permit some flexibility in antenna design, while at the same time (3) avoiding interference to incumbent licensees and unlicensed PLC systems which operate in bands up to 490 kHz. Extremely low antenna efficiencies at these frequencies virtually guarantee that the radiated levels from an Amateur LF station are below 2 watts EIRP, which is sufficient to insure against interference to PLC systems. ARRL is quite confident that Amateurs have the ability to both calculate EIRP and measure it accurately.

6. ARRL supports the Commission's conclusion that incumbent use of the 135 kHz band is relatively light, and a secondary Amateur allocation therefore raises few concerns (Notice, at paragraph 23). Domestic primary services and PLC systems will therefore not likely be in geographic proximity to LF amateur stations. Most Amateur

stations are in suburban environments, where antenna length is dictated by lot size. This will dictate lower antenna efficiencies. ARRL also agrees that the Amateur Service has a long history of compatible secondary operation with primary status services conducting long-distance communications, due to the Amateur's frequency agility and the normal, and virtually universal practice of listening to a frequency prior to transmitting on it.

7. The Commission, however, states that the technical rules proposed for the 135 kHz band would minimize any impact on adjacent-band RFID tags and in-band PLC systems. ARRL suggests strongly that the 1-watt EIRP limit (versus the 2 watts proposed by ARRL) is overly conservative, however, and, more urgently, the 100-watt transmitter power output (TPO) limit proposed (versus the 200 watts proposed by ARRL) is far too conservative, and will limit communications ability by Amateurs disproportionately to any possible interference potential. The typical EIRP achievable by an Amateur station operating at 200 watts TPO will be far less than 2 watts. If the concern about the TPO requested by ARRL is that EIRP is difficult to measure accurately, or that the antenna gain in some configurations would be difficult to measure, the simple answer is that EIRP is not particularly difficult to calculate, save for the effect of ground losses. If, however, EIRP in a given configuration is estimated on the basis of an assumption of a perfect ground, the actual EIRP will always be lower than calculated, so any errors by Amateurs in calculating EIRP will always be on the conservative side. If the concern is, as the utility industry fears, the anecdotal "kite-supported" antenna of substantial length and gain, the EIRP limit addresses any interference concern and the 100-watt TPO limit remains regulatory surplusage.

8. The power limits proposed in the Notice for the 135 kHz band are overly conservative relative to the regulations of other countries. In New Zealand, radio amateurs have operated since 1990 at 160-190 kHz with a permitted EIRP of 5 watts. In Belgium, Amateur power in the 135 kHz band is limited to 1 kW TPO. A high-end Amateur station in the United States would utilize a vertical antenna between 15 and 30 meters in height, which would be between 0.02 and 0.2% efficient. Even at 500 watts TPO, the EIRP would be less than 1 watt. Therefore, the 200-watt TPO limitation is unnecessarily conservative. ARRL continues to suggest that a 2-watt EIRP limit is reasonable, and a 200-watt TPO is required at minimum to permit reasonable experimentation.

9. The 135 kHz allocation proposed is certainly more urgent than the requested 160 kHz allocation due to the increasing Amateur occupancy of the 135 kHz band in other countries. The internationally harmonized allocation provides the opportunity for United States Amateurs to conduct international communications there. However, the Commission's rationale for not also proposing the 160 kHz allocation is problematic. The Notice, at paragraph 26, acknowledges that the number of incumbent primary users has decreased in this band over the years, but asserts that PLC use is "still significant." The Commission's analysis shows that there are approximately 4900 PLC systems in operation at 3000 locations in the 160 kHz band (Notice, at Footnote 61). If that is so, it cannot be reasonably argued that the low power levels proposed for Amateur operation in that band are likely to cause interference to unlicensed PLC systems, because the Air Force's now-terminated GWEN transmitters operated at more than 2000 watts ERP at numerous locations, without reported interference to PLC systems in the 160-175 kHz

band. It is incorrect to suggest that a 2-watt EIRP signal from an Amateur station will have an adverse effect on those same systems. Indeed, the only indication that PLC systems have suffered any interference at all is a vague remark by UTC to the effect that some interference attributed to "stray radio signals" of unspecified origin, were noted at unspecified times and locations. There is no reason to assume that PLC interference will occur from Amateur operation as proposed at 160 kHz. ARRL stands by its technical studies submitted in support of its petition, which clearly establish that, using extremely conservative assumptions regarding ground loss and Amateur antenna height, the required distance separation between Amateur stations and power lines carrying PLC communications for interference avoidance is less than 980 feet for 161 kV lines and less than 120 feet for 765 kV lines.[1] The location of an Amateur station active on the LF bands within those distances is extremely unlikely. Furthermore, the interference to an Amateur receiver from PLC signals at those ranges would be overwhelming (radiated PLC signals at those distances would be approximately 125 dB over the Amateur receiver's noise floor), so the interference potential to PLC systems from Amateur stations active on the LF bands would be self-limiting.

10. The Notice justifies the allocation of the 135 kHz segment to the Amateur Service on the basis of the relatively small number of PLC systems that operate in that band. Footnote 58 of the Notice states that there are approximately 430 PLC systems in 400 locations in the United States. That band, however, is only 2.1 kHz wide. If there are 4900 PLC systems operating in a band 30 kHz wide, the density of use of the 160 kHz band by PLC systems is far less than at 135 kHz. In any case, the availability of both

[1] PLC systems' ability to operate with little concern about interference from a radiating system is due to the fact that PLC receivers are directly connected to a distant transmitter by the transmission line. The result is high received power, on the order of –30dBm.

bands would increase the flexibility of radio amateurs to select a frequency that is not in use by PLC systems. The theory in proposing both bands is that, first, interaction with PLC systems can be even better avoided (in the unlikely event that such would ever be necessary) with the larger band available at 160 kHz. Second, the 135 kHz band will be harmonized with allocations made by CEPT and certain non-CEPT countries, while the 160 kHz band is wider and would allow sufficient spectrum for frequency selection at a given location, which is free from interference in either direction. The wider bandwidth at 160 kHz is also important so that more than telegraphy or slow-speed data operation can be conducted by Amateurs. Therefore, the 135 kHz allocation is necessary, but not sufficient for the purpose.

11. ARRL requests that the Commission allocate both the 135 kHz segment and the 160 kHz segment to the Amateur Service on a secondary basis. It is requested that the power limit for each band be 2 watts EIRP. ARRL suggests that the allocation of both bands is amply justified by the record in this proceeding. However, in any case, there should not be any further delay in the implementation of the 135 kHz band, and at the least, the Commission should defer the issue of 160 kHz to a later date, if necessary, the absence of interaction between Amateur stations and PLC systems is demonstrated at 135 kHz.

III. The 5250-5400 kHz Band

12. The proposed allocation of the 5250-5400 kHz band is, by contrast to the low-frequency allocation issue, essentially uncontested. There is extensive support in the Amateur community for this allocation, and no opposition in the record to date from any

non-Amateur source whatsoever. The issues are largely oriented toward Part 97 service rules that should apply to the band, discussed below. However, ARRL's petition, RM-10209, and the Notice proposal each acknowledge the Federal government assignments remaining in this band. The Notice states that Federal government use of the band is for ship-to-shore and fixed point-to-point communications. Accordingly, Amateur operation must be able to protect these assignments against interference. ARRL agrees with the Notice proposal that Amateurs should be able to avoid interference to the small number of Federal, and the even fewer non-Federal, assignments in the band.

13. As is the case with the low-frequency allocation, Amateur licensees can avoid interference to Federal government stations by means of dynamic frequency selection, and the normal "listen-before-transmit" (LBT) operating protocol that is employed by radio amateurs when selecting frequencies and initiating transmissions. While this is not a perfect solution in all cases due to propagation characteristics of the high-frequency (HF) bands, it is a sufficient means of interference avoidance most of the time. It would be especially effective in this case, where the propagation paths during most times of the day are short, frequencies occupied by Amateur or non-Amateur transmissions would be noted, and the occupied frequency avoided by radio Amateurs initiating communications. That this band is, for the foreseeable future, a domestic allocation further limits its occupancy by Amateur licensees, and thus limits any concern about interference to Federal government assignments. Finally, this band is of limited size, and its purpose is primarily to improve Amateur Radio emergency communications capability. Thus, it will be used for routine Amateur communications as are conducted in other Amateur HF bands, including emergency preparedness exercises.

14. The Notice, at paragraph 39, asks whether the Part 97 rules should be modified to codify the existing LBT protocols universally employed in the Amateur bands. This really is not necessary; Amateurs always employ this technique for telephony, telegraphy and data communications. There are a few, very limited segments of the HF bands, not here relevant, used for certain types of automatically controlled HF data systems, but even in those configurations, the networks incorporate LBT circuitry. Furthermore, the rules currently require that each Amateur licensee and control operator cooperate in selecting transmitting channels and making most effective use of Amateur Service frequencies [47 C.F.R. §97.101(b)] and prohibit willful or malicious interference [47 C.F.R. §97.101(d)]. Finally, it is well-established that "listen-before-transmit" is good Amateur operating practice in the HF bands in particular, and such practices are required for all licensees and control operators by the Commission [47 C.F.R. §97.101(a)].

15. The Notice, at paragraph 39, asks more substantively whether the proposed 1500-watt PEP output power limit applicable generally in other HF bands should be permitted here, or whether some lower limit might better insure against interference to Federal government assignments in the band. That paragraph also asks whether access to this band should be limited to Extra Class Amateur licensees only (for the same purpose – protection against interference to Federal government assignments) or whether, as ARRL proposed in its Petition, the band should be available to all licensees of General Class or above. Finally, the Notice asks in that paragraph whether an EIRP limit should be imposed, and asks for other suggestions for other means of reducing interference potential to incumbent assignments at 5250-5400 kHz.

16. Interference to incumbent licensees in this band is, in ARRL's view, unlikely. The Amateur Service is most sensitive to the obligation to protect non-Amateur primary users, and the best evidence of that is in the successful sharing with fixed service licensees in the 10,100-10,150 kHz band. It is most urgent that the Commission *not, in any case*, limit access to the proposed 5 MHz allocation only to Amateur Extra Class licensees. To do so would seriously compromise a fundamental purpose of the allocation in the first place: to provide a band that will be available for disaster relief and emergency communications. Radio Amateurs active in emergency, public service and disaster relief communications are most certainly not limited to Amateur Extra Class licensees. Rather, many, perhaps most of those persons hold General and Advanced Class licenses. No other HF Amateur allocation is so limited, and the restriction is not, as discussed above, necessary to minimize the density of use of the band, assuming that is the goal of the suggested restriction in the first place. The band is unlikely to be densely used by the Amateur Service, given (a) the limited size of it and the fact that most commercially-manufactured Amateur equipment for that band does not permit transmissions on the band without modification; (b) that it is a domestic allocation only, and will remain such for the foreseeable future;[2] (c) a fundamental purpose will be for disaster relief communications and emergency communications, which is not a principal interest of all Amateur licensees who actively operate in the HF bands, but only some of them; and (d) it is only one of what will be ten HF and Medium Frequency (MF) bands available simultaneously for Amateur operation.

[2] Great Britain has recently allowed its Amateurs the use of certain specific frequencies in the 5 MHz band, but there is no international allocation for the Amateur Service in that band.

17. The issue of special power limitations in the 5 MHz band is somewhat less of an urgent concern than is the license class restriction issue discussed above. On the one hand, communications during hurricane conditions in Caribbean insular areas, for example, require the flexibility to utilize higher transmitter power, since antennas in the subject areas may be compromised, makeshift affairs, and reliability of safety-of-life communications is a critical factor. It can also be anticipated that the communications will be conducted under potentially difficult propagation (i.e. high atmospheric noise) conditions, justifying the use of higher transmitter power. On the other hand, high power operation in this band is less likely in the near term due to the absence of commercially manufactured amplifiers that operate on this band. The current Part 97 rules already mandate use of only the minimum power necessary to maintain communications [47 C.F.R. §97.313(a)]. Since this is a flexible, yet well-known standard that is especially applicable to this band in particular (taking into account the shared status of 5 MHz and its principal use for emergency communications), it is suggested that the present rules are sufficient to discourage overpower operation. The Amateur Service can be relied upon to self-regulate in this instance. It is therefore urged that, unless the Commission concludes that there is a substantial need to restrict Amateur operating power so as to protect incumbent Federal assignments in the band, the Commission should instead rely on the present rules and impose no special power limitation. For the same reasons, no EIRP limits are appropriate. Amateurs will typically utilize dipole or monopole antennas for this band, with minimal gain, as opposed to directional, rotatable or fixed, high-gain arrays. Therefore, EIRP limits offer no advantages in terms of interference avoidance, and they would potentially compromise Amateur emergency communications ability.

18. Finally, at Paragraph 40 of the Notice, the Commission notes that ARRL did not propose any sub-band regulations, and thus all emission types would be permitted in the entire band. The Notice indicates that some comments were filed which encourage sub-bands, and notes that the Commission's rules segregate digital modes from other emissions to protect narrowband emissions such as data from wider emissions such as single-sideband telephony. Therefore, the Notice asks whether sub-band regulations are necessary or appropriate for this band, as they are imposed on the 3.5 MHz and 7 MHz Amateur bands.

19. ARRL specifically did not propose sub-bands for this allocation, for several reasons, and suggests that it is unnecessary and inappropriate to impose such regulations at the present time. First of all, and most importantly, any segregation of wideband and narrowband modes by rule reduces the flexibility that Amateurs would otherwise have to conduct the type of operation that they wish to conduct in a portion of the band that they determine will not interfere with Federal assignments. An Amateur must determine in real time whether or not to operate on a particular frequency in this very narrow allocation, or whether a transmission on that frequency might interfere with communications of another service. If an SSB transmission cannot be made in, for example, the lower 50 kHz of the band by regulation, and the upper 100 kHz portion where SSB is permitted by regulation is crowded, this reduces the subject Amateur's ability to operate in a portion of the band which will not interfere with the Federal or other non-Amateur assignment. Maintaining sufficient flexibility of operation in a band only 150 kHz wide, which is shared with other services, is important. Second, the 3.5 MHz band and the 7 MHz band are not directly comparable in terms of the advisability of

sub-band regulation, since those bands are 500 kHz and 300 kHz wide, respectively. The larger allocations are more appropriately subdivided by mode.

20. That having been said, ARRL would envision developing a band plan for the 5 MHz allocation which, though voluntary, can be expected to have a reasonable degree of adherence by operators nationwide. This plan will take into account the need to avoid interference to Federal assignments first and foremost, but would *otherwise* encourage narrowband modes in one segment, and wideband modes in another. The final reason why sub-band regulation is inadvisable in this band in particular is that the band is to be used for general Amateur purposes, and especially for emergency communications. Emergency and disaster relief communications at HF are typically conducted using SSB voice emissions. Limiting a portion of the band so as to preclude SSB voice in a portion of it is detrimental to the principal use of the band envisioned by ARRL. In any case, a determination of the necessity of subbands imposed by regulation should await some experience with Amateur access to the band and an evaluation of operating patterns and the success of interference avoidance.

21. The allocation of this band is a fundamental goal of the Amateur Service in the near term. It is most important to the increased obligations of the Amateur Service in emergency communications planning. It is urged that the Commission make this allocation without delay, and without the restrictions discussed in the Notice at paragraphs 39 and 40 of the Notice. It is especially important that the band be available to General, Advanced and Extra Class licensees. The band fills a critical propagation void between the 3.5 and 7 MHz bands, and would greatly facilitate disaster relief and other emergency communications.

IV. The 2400-2402 MHz Band

22. The Notice, at paragraph 49, proposes, in response to ARRL's Petition (RM-9949) to upgrade the allocation status of the Amateur Service at 2400-2402 MHz from secondary to primary and to create a primary allocation there for the Amateur-Satellite Service. This takes into account the fact that the segment is a part of the spectrum reserve for future applications established in the *Spectrum Policy Statement*, 14 FCC Rcd. 19868 (1999). Yet, both the Commission and NTIA have noted that this band, which is part of the reallocation of spectrum from the Federal government to the private sector pursuant to the Omnibus Budget Reconciliation Act of 1993, is to be allocated in such a way as to only minimally disrupt the Amateur operations conducted in those reallocated bands.[3] The principal benefit of this upgrade in allocation status is to provide some protection and assurance of future availability for the Amateur-Satellite service. Amateur satellites are funded using the private resources of individual Amateurs and Amateur groups. It is a struggle to accomplish what the Radio Amateur Satellite Corporation (AMSAT) has been able to achieve. Amateur satellite operation represents some of the greatest achievements of the Amateur Service, and the work of AMSAT volunteers is always at the forefront of communications technology. There has to be a reasonable assurance that an allocation will continue to be available for Amateur Satellite Service use into the future, since planning in that service is long-term.

23. As noted above, the band 2400-2450 MHz is compromised in terms of Amateur use by virtue of the explosive increase in noise from unlicensed devices.

[3] See, the *NTIA Spectrum Reallocation Final Report*, NTIA Special Report 95-32, February 1995, at p.4-30.

However the problem is less pronounced at the lower end of the band. As such, the Amateur-Satellite service in particular can continue to make use of the band. The Notice cites the input of AMSAT at paragraph 48 of the Notice, and notes that two of the transmitters in the exciting Phase 3D satellite now in orbit (now known as AMSAT OSCAR 40 or AO-40) and one receiver operate at 2400-2402 MHz. These are now in regular use. The Amateur Service has significant investment in this band, and it is being utilized to the fullest extent possible, given the proliferation of unlicensed devices in the 2400-2450 MHz band.

24. It is understood that the Amateur-Satellite service will not be exempt, by virtue of this proposed allocation upgrade, from the requirement in the Radio Regulations to avoid causing harmful interference to other services operating in accordance with the Table of Allocations outside of the United States. It is also understood that this proposal would not reorder the relationship between the Amateur and Amateur-Satellite services and ISM devices operating at 2400-2483.5 MHz. It is also understood that the band is extensively used by unlicensed Part 15 devices, and that such devices are not being displaced by virtue of this allocation alone. However, the Commission's question at paragraph 50 of the Notice is difficult to fathom. The Commission requests "comment on whether the proposed primary amateur and amateur-satellite service allocations would conflict with unlicensed use of the band." This question makes no sense. The Amateur service is a licensed radio service which now has allocation status in the 2400-2402 MHz band. Part 15 devices operate there without any allocation status. Part 15 devices cannot continue to operate (on an individual device basis) where interference is caused by that device to any licensed station, by rule. The change in the allocation status of the Amateur

Service or Amateur-Satellite Service from secondary to primary can therefore have no effect on the unlicensed use of the band, because the obligations of unlicensed Part 15 devices to both accept and not cause any interference does not change under any circumstances. ARRL continues to remind the Commission that *it cannot make allocation decisions involving incumbent services based on concerns about unlicensed services without allocation status*. That is unsound spectrum management. Accordingly, while the Commission has appropriately cautioned that the instant proposal does not, without more, displace existing Part 15 devices from the 2400-2402 MHz band, the concerns of Part 15 device manufacturers about conflicts between their devices and Amateur and Amateur-Satellite Services are irrelevant in the context of this proceeding.

25. Finally, the Commission asks whether any service rules require modification in order to implement the change in the Table of Allocations as proposed. ARRL suggests that no Part 97 changes are necessary or appropriate.

V. Conclusions

26. The three allocations proposals in this proceeding should be implemented immediately. The issues are not complex, and compatibility between Amateur uses in the subject bands and any other radio services is not a substantial concern in any of the three cases. The 5 MHz allocation in particular is an urgent priority of the Amateur Service, and it is respectfully requested that this allocation in particular be expedited. The service rules for the LF and the 5 MHz band should be established as requested in the respective ARRL petitions on which this proceeding is based. It is especially important that, in the 135 kHz band, the Commission permit TPO of not less than 200 watts, and in the 5 MHz

band, access be provided to all licensed Amateurs holding General, Advanced and Extra Class licenses.

27. The Amateur Service is appreciative of the Commission's support, and ARRL would note especially the responsiveness of the Commission's Office of Engineering and Technology, which has for many years, and especially recently, shown a keen understanding of, and support for, the unique needs and interests of the Amateur Radio Service.

Therefore, the foregoing considered, ARRL, the National Association for Amateur Radio, respectfully requests that the Commission implement the allocations as proposed in the Notice, with the operating parameters and service rules as discussed herein.

Respectfully submitted,

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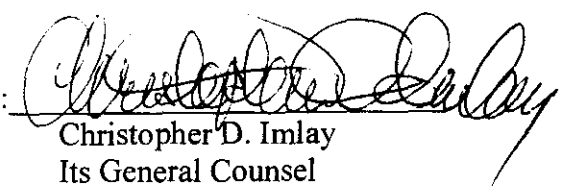
By: 
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